Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

# NATIONAL WEATHER SERVICE SOUTHERN REGION SUPPLEMENT 04-2003 APPLICABLE TO NWSI 10-310 SEPTEMBER 30, 2003

Operations and Services Marine Weather, NWSI 10-310

### COASTAL MARINE FORECAST SERVICES

**OPR:** W/SR11x5 (M. Bailey) **Certified by:** W/SR1 (S.Cooper)

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**SUMMARY OF REVISIONS:** This supplement supersedes Regional Operations Manual Letter (ROML) S-05-94, dated 06/20/94, filed with WSOM Chapter D-51 and memorandum dated 06/17/01 filed with WSOM Chapter D-51.

Signed by September 15, 2003
Gary Grice Date

Deputy Director, Southern Region

For

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Director, Southern Region

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### 1. Introduction.

Provides additional guidance and instructions for the Coastal Waters Forecast (CWF). Written instructions cannot address every situation. Operational personnel must exercise initiative and professional judgment to minimize risk to public safety and property in instances when written instructions do not provide appropriate guidance.

### 1.1. Interactive Forecast Process System (IFPS).

IFPS, a software generation program, cannot yet create all of the instructional wording called for in this Supplement. If the IFPS generated wording in the CWF or the wording in a headline reflects the intent of the forecast, editing of the product is not necessary.

# 2. <u>Coastal Waters Forecasts.</u>

### 2.1 Issuances.

a. <u>Product Issuance</u>. Reference Section 2.2.2 and 2.2.3 of 10-310.

Southern Region (SR) Weather Forecast Offices (WFOs) will issue <u>four</u> scheduled CWFs daily, per the schedule below, and issue unscheduled update forecasts as necessary. Scheduled product issuance times will be no more than 1 hour earlier than this schedule or more than 30 minutes after this schedule. Issuance times are dependent on time zones:

CDT: 4:30 AM; 10:30 AM; 4:30 PM; 10:30 PM, CST: 3:30 AM; 9:30 AM; 3:30 PM; 9:30 PM, EDT: 4:30 AM; 10:30 AM; 4:30 PM; 10:30 PM, EST: 4:30 AM; 10:30 AM; 4:30 PM; 10:30 PM, and AST: 4:30 AM; 10:30 AM; 4:30 PM; 10:30 PM.

b. <u>Abbreviations</u>. Abbreviations and contractions will not be used in the main body of the forecast so our customers can read our products with ease and NOAA Weather Radio can relay the information with ease to our customers.

### 2.2 Forecast Content. Reference Section 2.3.5 of 10-310.

a. <u>Headlines</u>. Headlines are used to emphasize warnings and watches for weather and sea state conditions likely to jeopardize the safety of mariners or marine operations. In SR, headlines will be used <u>only</u> through Day 2 in the CWF product (depending on when the product was issued, the last headline period will be either the 3<sup>rd</sup> or 4<sup>th</sup> period of the forecast).

Forecasters may use more than one headline to indicate multiple threats or worsening conditions. When using multiple headlines, forecasters should use discretion based on each situation on whether to highlight the most immediate threat in the first headline or put the headlines in chronological.

(1) Headline Format

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If conditions are expected in the first 12 hours, state the warning only. Mentioning the specific area in the headline is optional. Example:

...GALE WARNING IN EFFECT...

or ...GALE WARNING IN EFFECT [FOR LOCATION]...

If conditions are expected beyond 12 hours, state the conditions expected and when they are expected. Mentioning the specific area in the headline is optional. Example:

...GALE FORCE WINDS EXPECTED (TOMORROW)...or ...GALE FORCE WINDS EXPECTED (TOMORROW) [FOR LOCATION]...

- b. <u>Non-Tropical Cyclone Related Headlines.</u> Reference Section 2.3.5.a of 10-310. The CWF's in Southern Region (SR) will contain the headlines for Coastal Flood Warnings and Coastal Flood Watches.
- c. <u>Tropical Cyclone Related Headlines.</u> Reference Section 2.3.5.b of 10-310. If an official watch or warning has not been issued by the National Hurricane Center (NHC) <u>and</u> the NHC 72 hour forecast radii falls within your CWA, include the headline "HURRICANE CONDITIONS POSSIBLE (specify when)" or "TROPICAL STORM CONDITIONS POSSIBLE (specify when)" <u>only</u> for Day 2 Night (i.e. only for <u>periods</u> 4 or 5, depending on when the forecast was issued).
- d. <u>"Should Stay In Port"</u>. Reference Section 2.3.5.b of 10-310.
   Use "SMALL CRAFT SHOULD REMAIN PORT" in place of a "SMALL CRAFT ADVISORY" when a tropical storm or hurricane watch is in effect.
- e. Regional Definitions. Reference Section 2.3.5.c of 10-310
  - 1. SMALL CRAFT ADVISORY

The criteria for issuing a SMALL CRAFT ADVISORY for Southern Region offices will be forecast winds of 20 knots or greater, and/or forecast seas 7 feet or greater that are/is expected for more than 2 hours. Use this headline if these conditions are expected in the first 12 hours. If SCA conditions are expected in the 12 to 24 hour period, you may headline the SCA. For example, "...SMALL CRAFT ADVISORY CONDITIONS MAY BE REQUIRED THURSDAY..."

2. <u>SMALL CRAFT SHOULD EXERCISE CAUTION</u>
The cautionary statement "SMALL CRAFT SHOULD EXERCISE CAUTION" (SCEC) will be headlined only in the <u>first</u> period and used when forecast winds are "15 TO 20 KNOTS" or "15 TO 20 KNOTS AND GUSTY," provided seas are forecast to be less than 7 feet.

### 2.3 Forecast Parameters and Elements.

- a. Wind. Reference Section 2.3.8.a of 10-310.

  Normally, a single prevailing wind direction should be used in the CWF; however during certain situations (e.g. a wind shift) forecasters may use a small range of wind direction (e.g., 45 degrees, "WEST NORTHWEST" or WEST TO NORTHWEST).
  - 1. It is best to use a single sustained wind speed in the CWF; however, a range of 5 KT wind speeds can be used when significant trends or variations in wind speed are predicted during the forecast period. For example, NORTHEAST WINDS 10 TO 15 KNOTS, or NORTHWEST WINDS 13 TO 18 KNOTS.
  - Significant differences between sustained winds and wind peak gusts of at least 15 knots should be specifically stated. For example, EAST WINDS 40 KNOTS WITH GUSTS TO 60 KNOTS.
  - 3. Use the term "AND GUSTY" for expected gusts of 5 to 10 knots above the sustained wind speed (e.g. 15 TO 20 KNOTS AND GUSTY).
- b. <u>Seas</u>. Reference section 2.3.8.b of 10-310.

  Inland waters and bays exempted from having detailed seas state predictions should use a general description of sea conditions (i.e., rough, choppy, etc.) when it helps convey the severity of a given situation.
- c. <u>Weather</u>. Reference Section 2.3.8.c of 10-310. When mentioning precipitation, either areal coverage terms or probability terms may be used in the CWF.
- 3. Surf Zone Forecasts (SRF). Reference Section 3.0 of 10-310.

  An office issuing rip current information must use the SRF product for dissemination. The 'surf zone' is the very narrow area of water between the high tide level on the beach and the sea-ward side of breaking waves. Breaking wave heights, water level set up, and rip currents, are a few parameters WFOs can include in their SRFs. SRF content, dissemination times, seasonal or not, etc., is a local WFO option and should be developed in coordination with local safety agencies who have responsibility for beachfront safety.
- 3.1 Rip Currents. Reference Section 3.6. of 10-310.

  For WFOs which issue rip current information, the rip current hazards must be mentioned in the SRF product. Rip current information may also be mentioned in Hazardous Weather Outlooks and Marine Weather Statements, based on local office policy. Developing a rip current program for a WFO's surf zone area of responsibility

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is a collaborated effort between beachfront safety personnel (lifeguards, associations, beach patrol, etc.) and the WFO personnel.

# 4. <u>Graphical and Gridded Forecasts.</u>

In addition to narrative products, WFOs will issue their marine weather information in graphical format using IFPS/GFE. Outreach and education will help determine the type of graphical format and gridded parameters customers need from our forecasts.

### 1. SCEC conditions expected to develop within 12 hrs

...SMALL CRAFT SHOULD EXERCISE CAUTION...

.TODAY...SOUTHEAST WIND 10 TO 15 KNOTS...INCREASING TO 15 TO 20 KNOTS DURING THE AFTERNOON. SEAS 5 FEET.

.TONIGHT...SOUTHEAST WIND 15 KNOTS. SEAS 4 FEET.

.FRIDAY...SOUTHEAST WIND 10 KNOTS. SEAS 3 FEET.

.FRIDAY NIGHT...SOUTHEAST WIND 10 KNOTS. SEAS 3 FEET.

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### 2. SCA conditions expected to develop within 12 hrs

...SMALL CRAFT ADVISORY IN EFFECT...

.TODAY...SOUTHEAST WIND 15 KNOTS...INCREASING TO 20 TO 25 KNOTS DURING THE AFTERNOON. SEAS 5 FEET...BUILDING TO 7 FEET.

.TONIGHT...SOUTHEAST WIND 20 KNOTS. SEAS 7 FEET.

.FRIDAY...SOUTH WIND 15 TO 20 KNOTS. SEAS 6 FEET. SMALL CRAFT SHOULD EXERCISE CAUTION.

.FRIDAY NIGHT...SOUTHEAST WIND 20 KNOTS. SEAS 7 FEET.

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## 3. SCA conditions expected late in the forecast

...SMALL CRAFT ADVISORY CONDITIONS EXPECTED FRIDAY AND FRIDAY NIGHT...

.TODAY...SOUTHEAST WIND 15 KNOTS. SEAS 5 FEET.

.TONIGHT...SOUTHEAST WIND 15 TO 20 KNOTS. SEAS 6 FEET. SMALL CRAFT SHOULD EXERCISE CAUTION.

.FRIDAY...SOUTHEAST WIND 20 TO 25 KNOTS. SEAS 7 FEET.

FRIDAY NIGHT...SOUTHEAST WIND 20 TO 25 KNOTS. SEAS 8 FEET.

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### 4. Gale force winds expected to develop within 24 hrs

...GALE WARNING IN EFFECT...

.TODAY...NORTHEAST WIND 25 TO 30 KNOTS. SEAS 9 FEET.

.TONIGHT...EAST WIND 30 TO 35 KNOTS. SEAS 11 FEET.

.FRIDAY...EAST WIND 35 TO 40 KNOTS. SEAS 13 FEET.

.FRIDAY NIGHT...EAST WIND 25 KNOTS. SEAS 14 FEET.

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### 5. SCA increasing to gale

- ...SMALL CRAFT ADVISORY IN EFFECT...
- ...GALE FORCE WINDS EXPECTED FRIDAY AND FRIDAY NIGHT...
- .TODAY...NORTH WIND 25 TO 30 KNOTS. SEAS 8 FEET.
- .TONIGHT...NORTHEAST WIND 30 KNOTS. SEAS 10 FEET.
- .FRIDAY...EAST WIND 30 TO 35 KNOTS. SEAS 12 FEET.
- .FRIDAY NIGHT...EAST WIND 30 TO 35 KNOTS. SEAS 14 FEET.

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#### 6. Gale force winds late in the forecast

- ...SMALL CRAFT ADVISORY CONDITIONS EXPECTED FRIDAY...
- ...GALE FORCE WINDS EXPECTED FRIDAY NIGHT...
- .TODAY...SOUTHEAST WIND 15 KNOTS. SEAS 4 FEET.
- .TONIGHT...EAST WIND 15 TO 20 KNOTS. SEAS 5 FEET. SMALL CRAFT SHOULD EXERCISE CAUTION.
- .FRIDAY...NORTHEAST WIND INCREASING TO 25 TO 30 KNOTS. SEAS BUILDING TO 8 FEET.
- .FRIDAY NIGHT...NORTH WIND 35 KNOTS. SEAS 10 to 12 FEET.

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#### 7. Storm force winds expected to develop within 24 hrs

- ...STORM WARNING IN EFFECT...
- ...COASTAL FLOOD WARNING IN EFFECT...
- .TODAY...NORTHEAST WIND 30 TO 35 KNOTS. SEAS 12 FEET.
- .TONIGHT...EAST WIND INCREASING TO 50 KNOTS. SEAS BUILDING TO 20 FEET. COASTAL FLOODING POSSIBLE.
- .FRIDAY...EAST WIND 50 KNOTS. SEAS 20 FEET. COASTAL FLOODING LIKELY. .FRIDAY NIGHT...EAST WIND 40 KNOTS. SEAS 18 FEET. COASTAL FLOODING LIKELY.

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## 8. Gale increasing to storm force

- ...GALE WARNING IN EFFECT...
- ...COASTAL FLOOD WARNING IN EFFECT...
- ...STORM FORCE WINDS EXPECTED FRIDAY...

.TODAY...NORTH WIND 35 TO 40 KNOTS. SEAS 10 FEET.

.TONIGHT...NORTHEAST WIND 40 TO 45 KNOTS. SEAS 15 FEET. COASTAL FLOODING POSSIBLE.

.FRIDAY...EAST WIND 50 KNOTS. SEAS 20 FEET. COASTAL FLOODING LIKELY.

.FRIDAY NIGHT...SOUTHEAST WIND 35 TO 40 KNOTS. SEAS 16 FEET.

COASTAL FLOODING POSSIBLE.

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#### 9. Storm force winds late in the forecast

- ...SMALL CRAFT ADVISORY IN EFFECT...
- ...GALE FORCE WINDS EXPECTED FRIDAY...
- ...STORM FORCE WINDS EXPECTED FRIDAY NIGHT...

.TODAY...SOUTHEAST WIND 20 TO 25 KNOTS. SEAS 6 FEET.

.TONIGHT...EAST WIND 25 TO 30 KNOTS. SEAS 8 FEET.

.FRIDAY...NORTHEAST WIND 30 TO 35 KNOTS. SEAS BUILDING TO 12 FEET.

.FRIDAY NIGHT...NORTH WIND INCREASING TO 50 KNOTS. SEAS BUILDING TO 20 FEET.

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